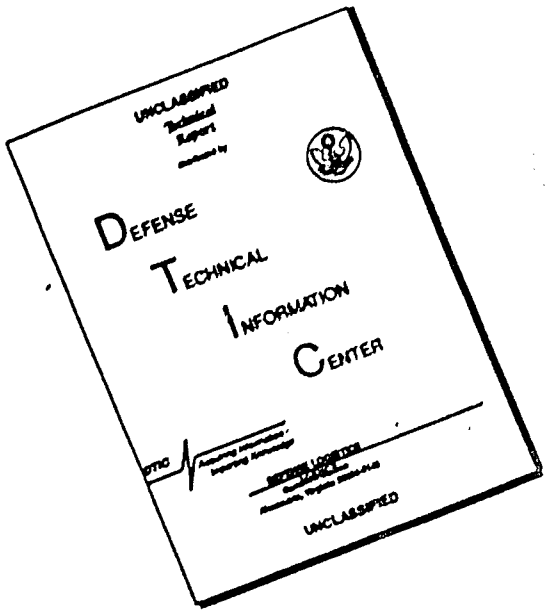
AD NUMBER
AD864406
LIMITATION CHANGES
TO: **Approved for public release; distribution is unlimited.**
FROM: **Distribution authorized to U.S. Gov't. agencies and their contractors; Administrative/Operational Use; 16 JAN 1970. Other requests shall be referred to Office of the Adjutant General (Army), Washington, DC 20310.**
AUTHORITY
AGO ltr 29 Apr 1980

DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AGDA (M) (13 Jan 70) FOR OT UT 694275 16 January 1970

SUBJECT: Operational Report - Lessons Learned, Headquarters, 168th Engineer Battalion, Period Ending 31 October 1969

SEE DISTRIBUTION

1. Subject report is forwarded for review and evaluation in accordance with paragraph 4b, AR 525-15. Evaluations and corrective actions should be reported to ACSFOR OT UT, Operational Reports Branch, within 90 days of receipt of covering letter.

2. Information contained in this report is provided to insure appropriate benefits in the future from lessons learned during current operations and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

1 Incl
as

DISTRIBUTION:
Commanding Generals
US Continental Army Command
US Army Combat Developments Command
US Army Materiel Command
Commandants
US Army War College
US Army Command and General Staff College
US Army Armor School
US Army Aviation School
US Army Engineer School
US Army Field Artillery School
US Army Infantry School
US Army Special Warfare School

Copies furnished:
Office, Chief of Staff, US Army
Deputy Chiefs of Staff
Chief of Research and Development
Assistant Chiefs of Staff

UNCLASSIFIED REPORT
DISTRIBUTION NO FOREIGN WITHOUT APPROVAL OF ASSISTANT CHIEF OF STAFF FOR FORCE DEVELOPMENT (ARMY) ATTN FOR OT UT. WASHINGTON, D.C. 20310

Protective marking cancelled when separated from inclosure.

FOR OFFICIAL USE ONLY

DEPARTMENT OF THE ARMY
Headquarters, 168th Engineer Battalion (C) (A)
APO San Francisco 96289

EGEC-3 7 November 1969

SUBJECT: Operational Report-Lessons Learned of the 168th Engineer Battalion (Combat) (Army) for the Period Ending 31 October 1969, RCS CSFOR-65 (R2)

Commanding Officer
79th Engineer Group
ATTN: EGE-3
APO US Forces 96491

Commanding General
20th Engineer Brigade
ATTN: AVBL-OS
APO US Forces 96491

Commanding General
United States Army, Vietnam
ATTN: AUHGC-DH
APO US Forces 96307

Commander-in-Chief
United States Army, Pacific
ATTN: GPOP-DT
APO US Forces 96588

FOR OT UT
694275

Inclosure 1

FOR OFFICIAL USE ONLY

EGEC-3 7 November 1969

SUBJECT: Operational Report-Lessons Learned of the 168th Engineer Battalion (Combat) (Army) for the Period Ending 31 October 1969, RCS CSFOR-65 (R2)

Section 1. Operations: Significant Activities.

a. General. The 168th Engineer Battalion (Combat)(Army) continued its mission of combat and operational support and base camp construction. At the beginning of the quarter, all units were located in Lai Khe. On 10 August, an advanced party from Company A moved to Dau Tieng to make preparations for the redeployment of the remaining elements of the company to that location. The rest of the company moved to Dau Tieng shortly thereafter. On 12 September, Company C completed their relocation to Quan Loi in order to support the 1st Cav Div. On 12 Deptember, the 1st Platoon of Company B was moved to Phuoc Vinh to begin work on the foundation and floor of an 80'x185' hangar which would be dismantled and moved from Blackhorse. On 14 September, the 3d Platoon of Company B was moved to Blackhorse to begin the disassembly of the hangar. A small amount of minesweep work in the Lai Khe area was conducted, and combat engineer support was provided for the 60th (LC) Co and for the 984th (LC) Co. On 2 September, enemy forces were reported to have been located in the vicinity of Lai Khe Base Camp. Per orders of CG, 1st Infantry Division, the 168th Engineer Battalion (C)(A) reorganized as infantry and accomplished a two company operational sweep 1½ KM outside the perimeter wire. Headquarters Company was also reorganized as infantry and remained at the line of departure in reserve. During the quarter, the normal operations of base camp development and construction of minimum essential requirements continued.

b. Command. LTC E. McK. Roper, Jr., assumed command of the Battalion on 31 August from LTC ..L. Romaneski. Major Phillip E. Custer was replaced as Battalion Executive Officer on 1 September by Major Lewis C. Sowell, Jr. On 18 August, Major Victor J. Polich Jr. assumed the position of Battalion S3 from Major Benny B. Rogers. 2LT Richard Seltz assumed the duties of Battalion S1 from Captain Robert D. Bird on 25 October. Captain Antonio R. Janairo was replaced as Battalion S4 by Craig R. Hutchinson on 1 August. On 22 October, 1LT Harold Maas assumed the S4 position from Captain Hutchinson, with the latter's departure to take command of Company A. 1LT Bobbye R. Boyd continued to serve as Battalion S5. 1LT Robert Rodriguez became the Battalion S2 on 21 August replacing Captain John B. Whitten who became the commander of Company A. Captain Hutchinson replaced Captain Whitten on 26 October. Captain David E. Poixotto continued to serve as commander of Company B. Captain Charles B. Lawrence took command of Company C from 1LT John I. Wright on 12 August. Captain Wilmer O. Elliott replaced Captain David M. Hoibel on 22 August as commander of Company D. Captain Donald R. Hanco assumed command of Headquarters Company on 2 September replacing 1LT David W. Gilman who had replaced 1LT James F. Vallery on 24 August. 1LT Edwin Farley continued to serve as commander of the 714th Engineer Detachment (FL). The 702d Engineer Detachment (FL) under the command of 1LT Dale Jepsen was detached from the Battalion on 19 September.

c. Personnel, Administration, Morale, and Discipline.

(1) The personnel strength fluctuated during the quarter from a high of 106% to the present 94%. Shortages exist in most categories of non-commissioned officers with a critical shortage in squad leaders, motor sergeants and supply sergeants. Shortages within junior enlisted MOS's include engineer equipment mechanics and wheeled vehicle mechanics. Officer strength has been satisfactory throughout the quarter.

(2) The morale of the battalion continued to be excellent. Chapel attendance and character guidance have reached record highs in the battalion during the quarter.

(3) Other statistics of S1 interest are as follows:

Summary Courts Martial - 4
Special Courts Martial - 4
Foreign Service Tour Extensions - 125
VIP Inquiries - 5
AWARDS: Legion of Merit - 1
Bronze Star - 24
Army Commendation Medal - 65
Purple Heart - 2

d. Intelligence.

(1) The S2 section continued to conduct reconnaissance for the Battalion as needed. Reconnaissance missions conducted for combat support operations were aerial reconnaissance of a projected secondary road network in the area northwest of Cu Chi and a reconnaissance of an airfield at Chon Thanh for possible upgrading to C-130 capability.

(2) The S2 section provided security for the Battalion when single vehicles were dispatched for operations in unsecured areas.

(3) Special emphasis was placed on renovating all perimeter bunkers and towers as well as repairing and replacing perimeter wire. Tanglefoot and fougasse were installed under the technical supervision and instruction of the intelligence section.

(4) The S2 section originated and conducted a daily PSYOP program by distributing leaflets offering rewards for weapons and munitions. So far, the section has distributed approximately 70,000 leaflets in the surrounding area.

e. Plans, Operations, and Training.

(1) Plans: Plans were formulated for five new "design and construct" directives received from the 79th Engineer Group. Facilities designed included two mortar pads, a POL berm with cyclone fence protection to be erected near the Lai Khe Miniport, a fuel bladder plus protective revetments, and security facilities around Lai Khe Plaza. Plans and specifications were also formulated for various directives calling for latrines and showers, a plot plan was made of the power distribution system for Co D, 227th AHB, and a wiring diagram was prepared for the Adams Huts located in Lai Khe and Dau Tieng.

(2) Combat Support

(a) Phu Cuong Minefield Removal (Beginning of Quarter - 3 Aug 69). Co D was tasked with removing a minefield at Phu Cuong in support of the US Navy. Booby-traps, claymores, and anti-personnel mines were removed from the minefield.

(b) Engineer Support for the 984th (LC) Co. (Beginning - end of quarter). Co C provided general combat engineer support for the 984th (LC) Co. On 30 Sep 69 this directive was reassigned to Co A. Work on this project consisted of constructing field showers and latrines, maintenance hardstands, helipads, command post bunkers, defensive positions, and a perimeter defense system. Work will continue until the estimated date of completion of 15 Nov 69.

(c) Engineer Support for the 60th (LC) Co (25 Aug 69 - 9 Oct 69) Co D provided general combat engineer support for the 60th (LC) Co. Work consisted of setting up night defensive positions, destroying enemy bunkers, and providing minesweep support when necessary.

(d) Minesweep, Dau Tieng to LTL-26 (2 Oct 69 - end of quarter). The third squad of the third platoon, Co A, supported the 25th Inf Div by providing daily minesweep operations on route 239 from Dau Tieng to FSB Hunter. The minesweep team began operations each morning at 0600 hours and returned to FSB Hunter in the evening to prepare for the next day's work.

(e) Dau Tieng, Perimeter Lighting System (19 Aug 69 - end of quarter). The 3rd Platoon of Co A was directed to complete the lighting system which was started by Co C, 588th Engr Bn. Work on this project consisted of installing 64,100 feet of wire, 159 fixtures and 75 insulator racks. In addition, 174 fixtures were rewired, and 8 poles were replaced. General maintenance and corrections of malfunctions and deficiencies in the system is being provided for an indefinite period of time.

(3) LOC Maintenance: On 27 Aug 69, Co C installed a double 24" culvert 60' long, in the vicinity of the East Gate at Lai Khe. Two sandbag headwalls were constructed, and the culvert was backfilled.

(4) Operational Support

(a) Lai Khe Ammo Trains Area (Beginning of quarter - 8 Aug 69). The work remaining on this project since the beginning of the quarter consisted of completing the facilities and making final adjustments where necessary. The protective berm on the east side of the facility was constructed, the storage hardstand divider berms were completed, and the storage hardstands were upgraded. A 10' guard tower was prefabricated and erected, and a walkway bridge to the tower was installed. Five sandbag headwalls were built for the drainage of the hardstands. A final grade was put on all roads and hardstands in the area.

(b) Lai Khe Prefab Revetments (Beginning of quarter - 15 Aug 69). This project consisted of constructing a total of 4,000 linear feet of 40" high revetments for the buildings in the 1st Inf Div HQ area. Since the start of the quarter, 1,035 linear feet of revetment were erected and backfilled. The project was completed on 15 Aug 69.

(c) Lai Khe, MSR 168th Engr Bn (Beginning of quarter - 15 Sep 69). This project consisted of 40 wooden tent floors, 38 shower heads, 46 latrine holes, 83,000 square yards of hardstands, and 22,370 square yards of roads. Work on the hardstands and roads was hampered on several occasions because of extreme wet conditions, but the improvement of the drainage system throughout the battalion facilitated work. The project was completed on 15 Sep 69.

(d) Lai Khe Taxiways and Ramps (Beginning of quarter - 30 Aug 69). This project consisted of installing 10,000 square yards of M8A1 matting for use by the Air Force in order to provide usable access from revetments to the runway for its OV-10 aircraft. Co C installed the matting, then painted the surface of the runway with non-skid paint. This project was completed on 30 Aug 69.

(e) Lai Khe, Helicopter Pad Rehabilitation (Beginning of quarter - 21 Oct 69). The project consisted of enlarging and covering an existing ditch with M8A1 matting, installing culvert to provide access across the ditch, and spreading peneprime in the hardstand areas. Co C worked on this project until 14 Oct when the project was transferred to Co B due to the relocation of Co C to Quan Loi. Co B was responsible for the final grading and compaction of the area. This project was completed on 21 Oct 69.

(f) Lai Khe, MER for D/227 AHB, 1st Cav Div (beginning of quarter - 25 Oct 69). The 3rd Platoon of Co B, was tasked to construct seventy-five hundred square yards of hardstand, and five stogie pads. This portion of the MER was completed on 21 October. A power distribution system was also installed in the area. Two-thousand feet of wire, fourteen house drops, and a four guy-anchor system were installed. Co D completed the power system on 25 October. The 1st Platoon of Co A constructed revetments and a maintenance hardstand. A drainage system was also provided for the area. This part of the MER project was completed on 6 Aug.

(g) Lai Khe, Helicopter Facilities (beginning of quarter - 25 Oct 69). This project, which was 90% complete at the beginning of the quarter, was completed on 25 Oct by Co D. An increase of scope to the initial directive consisted of relocating a POL bladder and constructing revetments around it, and reinforcing the existing OV-10 helicopter revetments.

(h) Lai Khe, MER for 1st Inf Div Phase II (9 Jul 69 - End of quarter). This project is a composite of MER requirements for various units located throughout Lai Khe Base Camp. The original directive called for the construction of 153 tent floors, 54 latrines, 34 showers, 2 concrete mess pads, and 2500 square yards of hardstands. Company D was tasked to construct this project, however the unavailability of materials made it necessary to stop work on 21 October. Work on the project resumed on 30 Oct with 41% of the work completed, and total completion is expected on 30 November.

(i) Chan Thanh, Upgrade of Thunder III (4 - 8 Aug 69). One platoon of Co D was moved to Chan Thanh on 4 Aug 69 to repair approximately 1.7 KM of road in the vicinity of Chan Thanh. A total of forty feet of 24" diameter culvert was installed and one-hundred-fifty cubic yards of laterite were used to backfill the culvert.

(j) Lai Khe, MER for Co A 227th AHB (11 Aug 69 - 16 Oct 69). This project consisted of constructing a total of seventy-five-hundred square yards of stablized hardstand, two revetments 64' lg x 8' H, three 4 hole latrines, and two 6 head showers with water storage tank and tower. Construction of the hard-stand was severly hampered on several occasions due to extreme wet conditions. Co B completed this project on 16 Oct 69.

(k) Lai Khe, MER for 2d Bde, 1st Cav Div (25 Aug 69 - 14 Sep 69). This project consisted of the construction of one 6 head shower, and one 12 hole latrine. Laterite bases were laid for the buildings, concrete pads were poured, and the structures were prefabricated and erected at the site.

(l) Lai Khe, ASP Fence System (28 Aug 69 - 5 Sep 69). Co C was tasked to install six-hundred meters of cyclone fence on the west side of the Lai Khe ASP. This project was completed on 5 Sep 69.

(m) FSB Hartman, water support (29 Aug 69 - 21 Sep 69). On 29 August, an ERDLATOR with operators was dispatched to FSB Hartman to support the 1st Inf Div units at that location with potable water. This project was terminated on 21 Sep when the fire support base closed down.

(n) Repair and Reconstruction of Security Facilities, Lai Khe Plaza (4 - 10 Sep 69). Co B was tasked to construct and repair the security facilities around the Lai Khe Plaza. An old concrete bunker was removed and the hole was backfilled. The MP checkpoint was replaced with a completely new building, a new chain link fence was erected around the area and a personnel and security gate, which could be securely locked at night, was installed.

(o) Quan Loi, MER for 1st Cav Div units (10 - 30 Sep 69). On 9 Sep, the 1st Plt of Co C was transported to Quan Loi to commence work on this project. Twelve revetments were prefabricated, erected, and filled with laterite.

(p) Dau Tieng, MER for1st Inf Div, (20 Sep 69 - 23 Oct 69). This project consisted of the construction of eight each 6 hole latrines, and eight each 6 head showers, for various units of the 1st Inf Div at Dau Tieng. The structures were prefabricated in Co A area, then transported and erected on existing concrete slabs at the users' sites.

(q) Phuoc Vinh, Facilities for 1st Air Cav (12 Sep 69 - 30 Oct 69). Co B was tasked to disassemble an 80' x 185' hangar at Blackhorse, and reassemble the structure at Phuoc Vinh. On 14 Sep, the 3rd Platoon of Co B was moved to Blackhorse to begin disassembly of the hangar, transport the materials to Phuoc Vinh, and reassemble the hangar. On 12 Sep, the 1st Plt of Co B was moved to Phuoc Vinh to begin work on pouring the 80' x 185' concrete pad for the hangar. On 2 Oct, the 3rd Platoon moved to Phuoc Vinh and started to erect the hangar transported from Blackhorse. On 28 Oct, eight men from Co B and 2 men from the 714th Engr Det (PL) were moved to Phuoc Vinh to help install the wiring to complete the hangar.

(r) Dau Tieng, Ammo Storage Point (13 Sep 69 - end of quarter). The 1st Platoon of Co A, was tasked to construct an ammo storage point for the 1st Bde, 1st Inf Div. A perimeter berm, to include intermediate berms within, was formed to provide for individual storage areas. Four-hundred feet of ditch were cut for the drainage in the area, ninety feet of 30" dia culvert and sixty feet of 36"

culvert were installed and backfilled. One-hundred-fifty cubic yards of laterite were used for the floor of the ASP, and the area was compacted and penepriined. The project is expected to be completed on 6 Nov 69.

(s) Dau Tieng, MER for 1st Cav Div (14 - 30 Sep 69). The 1st and 2nd Platoons of Co A constructed a total of five-hundred-thirty-six linear feet of helicopter maintenance revetments. The revetments were prefabricated of corrugated metal and lumber in Co A area, then transported and erected at the job sites. A total of 2,365 cubic yards of laterite were utilized as backfill for the revetments.

(t) FSB Normandy III, Water Support (15 Sep 69 - end of quarter). One EDDL.TOR with operators from the Bn S4 were dispatched to FSB Normandy III to support the 1st Inf Div units at that location by providing them with potable water. This project is scheduled to be completed on 15 Dec 69.

(u) FSB Mortain, MER Latrines (18 - 29 Sep 69). On 18 Sep, personnel and equipment from Co C were moved to FSB Mortain to begin work on this project. Work consisted of the construction of three four hole latrines for units at that location. Laterite bases were prepared, concrete pads were poured, and the structures were prefabricated and erected.

(v) Thunder I, II, III, MER for 1st Inf Div (19 Sep 69 - 31 Oct 69). This project consisted of constructing three 4 hole latrines and two 6 head showers at FSB Thunder I, three 4 hole latrines and three 6 head showers at FSB Thunder II, and three 4 hole latrines and two 6 head showers at FSB Thunder III.

(w) Quan Loi, Radar Tower (20 Sep 69 - 17 Oct 69). This project consisted of constructing a laterite base, pouring a 18" concrete pad, then prefabricating and erecting a 50' steel radar tower for the airfield GCA. Co C was directed to construct the tower, and completed the project on 17 Oct 69.

(x) Road Maintenance (21 Sep 69 - end of quarter). Co A was tasked to support the 25th Inf Div in upgrading LTL-19 from Khiem Hanh to AP Suoi Cao, and LTL-253, from AP Suoi Cao to Go Dau Ha. The scope of work included the maintenance and upgrade of 165,000 square yards of road, and cutting ditch lines as required.

(y) M4T6 Dryspan Bridge (23 Sep 69 - 5 Oct 69). On 23 and 24 Sep, Co A cratered an LTL-19 causeway, using one-hundred pounds of C4 explosive, in order to relieve flood pressures on the road. A thirty-eight foot length of M4T6 dryspan was installed, and a coffer dam was constructed. Three sections of 48" diameter culvert were installed and backfilled, then the coffer dam was

blown. The dryspan bridge was removed and three additional culverts were emplaced and backfilled. A total of two-hundred-twenty-eight feet of 48" culvert and two-hundred-twenty cubic yards of laterite, and approximately 60 cubic yards of rock were spread for the road surface.

(z) Quan Loi, Gun Pad Rehabilitation (27 Sep 69 - end of quarter). The initial scope of this project consisted of rehabilitating two heavy gun pads, however, on 7 Oct, the scope of the work was increased to include a third gun pad. Laterite in four spade pits was replaced with crushed rock, and adequate drainage was provided for the facility. The project was expected to be completed on 6 Nov 69.

(aa) Lai Khe, Prefab Personnel Bunkers, (30 Sep 69 - 31 Oct 69). Co D was tasked to prefabricate and erect twenty-seven personnel bunkers in the 1st Inf Div HQ area. Frames were also erected for revetments around four of the bunkers. The using unit is scheduled to complete the construction of the revetments and fill them with laterite.

(bb) Lai Khe, POL Berms, (2 Oct 69 - end of quarter). This project consisted of tearing down the revetments around four POL tanks at the Lai Khe airport and replacing them with berms 5' high. At the end of the quarter a berm has been built around two POL tanks and the berm around the third tank nears completion. To date, a total of eighteen-hundred cubic yards of laterite have been utilized to build up the berms. This project is scheduled for completion on 11 Nov 69.

(cc) Lai Khe, 4.2 Mortar Pads (6 - 15 Oct 69). Co B constructed two 10'x10' mortar pads with parapets for 2/33rd Arty in Lai Khe. Work on this project included the pouring of the concrete pads, then placing crushed rock in the pads, installing drainage pipes and laterite.

(dd) Quan Loi, Helicopter Facilities (AHA). (7 Oct 69 - end of quarter). Co C was instructed to construct an Aviation Armament Logistics Area for the 1st Cav Div in Quan Loi. This project consisted of modifying six existing AHIG revetments, constructing seventeen AHIG-L-shaped revetments, four rearm points, four rocket storage bunkers, and one white Phosphorous storage bunker. The existing ASP berms were to be modified, and a total of 50,000 square yards of hardstand were to be rehabilitated. At the end of the reporting period Co C had completed 32% of the facilities with total completion expected on 30 Nov.

(ee) Lai Khe, UH-1 Helicopter Revetments (20 Oct 69 - End of quarter). Co D was tasked to construct two-hundred-thirty-four linear feet of UH-1 helicopter revetments for the 1st Inf Div at Lai Khe. On 23 Oct, work had to be halted on this project due to a lack of construction materials. At the end of the reporting period, work was 10% complete, and the expected completion date is 17 Nov.

(5) Base Camp Construction

(a) Lai Khe, ASP (Beginning of quarter - 28 Aug 69). This project consisted of providing lighting facilities for the Ammunition Supply Point at Lai Khe. Fifty-three poles were set in concrete, a generator hardstand was constructed, and a concrete pad was poured. A total of eleven-thousand feet of wire and thirty light fixtures were installed to complete the project.

(b) Lai Khe, Aviation Support Facilities (Beginning of quarter - 28 Aug 69). This consisted of a two bay helicopter wash rack and an aircraft maintenance hangar. Improvements were also made to the drainage system in the area.

(c) Lai Khe and Dau Tieng, 1st Air Cav Facilities (10 Aug 69 - 10 Sep 69). Company A was tasked to dismantle seven 20'x60' Adams huts at Blackhorse and transport the buildings to Dau Tieng. Concrete pads were poured, and the buildings, to include all the necessary wiring, were erected. Company C dismantled two 20'x30' and two 20'x60' Adams huts at Blackhorse, and transported them to Lai Khe. One 20'x30' and one 20'x60' building were erected at Co A, 227th AHB, and the remaining two buildings were reconstructed at Co D, 227th AHB. All necessary wiring was also installed.

(d) Lai Khe, Power Distribution System (Beginning of quarter - 31 Aug 69). The power distribution for Lai Khe Base Camp includes 111,000 feet of primary lines, 142,000 feet of secondary lines, 1,714 poles, and 96 power transformer banks. The 714th Engineer Detachment (PL) and the 702nd Engineer Detachment (PL), both assisted by Company B, completed the installation of the facility on 31 August 1969. After the completion of this project, as-built drawings and 1354's were prepared and completed, and a technical inspection of the completed facility was started by P&E. The construction of four underground cables under QL-13, which were an addition to the initial project, was started on 22 September, however, work has been delayed due to a lack of digging equipment. Much effort on this project was devoted to corrections of deficiencies in the system.

(e) Lai Khe, Cantonment Facilities Phase II (Beginning of quarter - 31 Oct 69). During the reporting period, Company C started and completed work on the grease rack for the 701st Maint Bn. Company D dismantled a 40'x96' PASCOE building at Dong Tam and transported the structure to Lai Khe to be used as a mess hall

for Company A, 227th AHB. The actual construction of the building was completed on 6 September. All wiring was installed in the mess hall and a fan suspension system was also constructed. On 24 October, Co B began work on building an 8'x8'x8' sump and a 3'x4'x5' grease trap and completed the project on 31 October.

(6) Training.

(a) The battalion continued to conduct training courses in accordance with USARV Reg 350-1, at company level. Replacement training was accomplished at schools operated by the 1st Infantry Division at Di An.

(b) The Battalion conducted weekly Officer and Senior Non-Commissioned Officer classes. Subjects taught during this reporting period were Maintenance Management, D7E Dozer, Front Loader, Grader, the M-16 rifle, Communications Procedures, M-17 Protective Mask, and the TAERS System.

(c) Several special instruction courses were conducted, including Geneva Convention, Field Sanitation, Civil Affairs, Relations with Vietnamese, Medical Care, fire-arms familiarization, use of various defense measures employed on the perimeter defense, and anti-sapper activity.

(7) Logistics

(a) The end of the quarter finds the battalion preparing for the coming dry season and its construction schedules as well as deploying in a much larger operational area to meet its present and projected missions. Current critical shortages of equipment in our preparation are summarized as follows: 1 Crane, 20 ton, Truck Mounted; 1 Compressor, 250 cfm; 5 Semi-Trailers, Lowbed, 25 ton; 1 Truck Dump, 5 ton; 2 Truck, Fuel, 2½ ton, 1 Shop Equipment, Org Repair; 3 Tank and Pump Units; 1 Distributor, Bituminous, 800 Gal; 3 Truck, Util, ¼ ton; 18 Radio Sets, AN/GRC 125; 12 Radio Sets, AN/VRC-47; 24 Antennas, RC-292. Dump truck input has kept pace with losses, and we are finally up to 100% fill on 10 ton Tractors though only 50% fill on the 25 Ton Lowbeds. With the deployment of our companies, the lack of the antennas, RC-292, is critically hampering our communications. With the projected secondary road projects we are anticipating 100% fill of the Bituminous Distributor, Tank & Pump Units, and the Fuel Trucks.

(b) Combat losses during the period consisted of the following:

ITEM	QUANTITY	REASON
Truck, Tractor, 10T	1 ea	Mine

(c) During the reporting period, the S4 Section produced 43, 575 gallons of potable water at fire base Hartman, 199, 525 gallons of water at Normandy III NDP, and 34,000 gallons of water at Lai Khe Base Camp. Natural spring water was the source in all cases.

(d) Class II & VII supply support was tranferred from the 624th DSU in Long Binh to the 758th DSU in Phou Loi. Distance for delivery of requisitions has been cut in half, though the distance for hand carry remains the same. Hand tool shortages continue to be a problem as well as the resupply of sets, kits and outfits being slow.

(e) During the quarter the accountability for construction materials was streamlined by setting up inventories on stock control cards and redesigning the project folders to reflect current materials issued. The results have increased our efficiency in preparing reports and controlling as well as accounting for the materials. We are in the process of setting up an OSL (Operational Stockage Load) for construction materials to help alleviate the issue delay created by short fuse projects and time frame for preparation of approved BOM's.

8. Information.

(a) The information program provided coverage of major accomplishments of the battalion. Individual performance was recognized through the submission of home-town news releases. During the reporting period, 281 home-town news releases were submitted to the 79th Engineer Group. Each company submitted a weekly information report to the Battalion concerning significant events taking place.

(b) The weekly reports were reviewed by the Battalion PIO. Those reports containing newsworthy information were prepared and submitted to the 79th Engineer Group in the form of news articles.

(c) During the reporting period, 56 articles were submitted to the 79th Engineer Group. The Battalion received news coverage in the Pioneer, The Castle Courier, The American Traveller, The Stars and Stripes, and the Army Reporter. In the fall issue of the KYSU Magazine, the Battalion received a three page layout on mine detection operations. The Five Star Review continued to give local news coverage to the members of the Battalion on a bimonthly basis.

EGEC-3 7 November 1969

SUBJECT: Operational Report-Lessons Learned of the 168th Engineer Battalion (Combat) (Army) for the Period Ending 31 October 1969, RCS CSFOR-65 (R2)

Section 2. Lessons Learned: Commander's Observations, Evaluations, and Recommendations.

1. Personnel: None

2. Operations:

(a) Clearing Minefields.

(1) Observation: Clearing minefields by using conventional methods such as mine detectors and probes, is a tedious and time consuming process.

(2) Evaluation: A minefield can easily be cleared by burning the area first, then making a sweep with mine detectors. A hydroseeder can be used to spray deisel fuel for a distance of 50 to 60 meters, and flares can then be utilized to ignite the deisel fuel.

(3) Recommendation: That deisel fuel be spread and ignited over a minefield before clearing operations begin.

(b) Construction of cinder block walls.

(1) Observation: A great deal of time and effort can be saved if extraneous bits of material are used to fill the holes in cinder blocks.

(2) Evaluation: Time and effort can be saved in the construction of cinder block walls if the holes in the blocks are filled with small rock and pieces of hardened concrete. This procedure saves on the amount of mortar used and provides for a surface for the next course of mortar to be laid.

(3) Recommendation: That small pieces of rock and hardened concrete be used to fill the holes in cinder blocks when constructing concrete block walls.

(c) Installation of Deadmen.

(1) Observation: Deadmen become unstable when they are not the proper length.

(2) Evaluation: When installing deadmen which cannot be obtained in the proper length required, "U" shaped pickets can be utilized to reinforce them. The deadmen braces itself against the steel picket, thus providing a greater bearing space on the entire area.

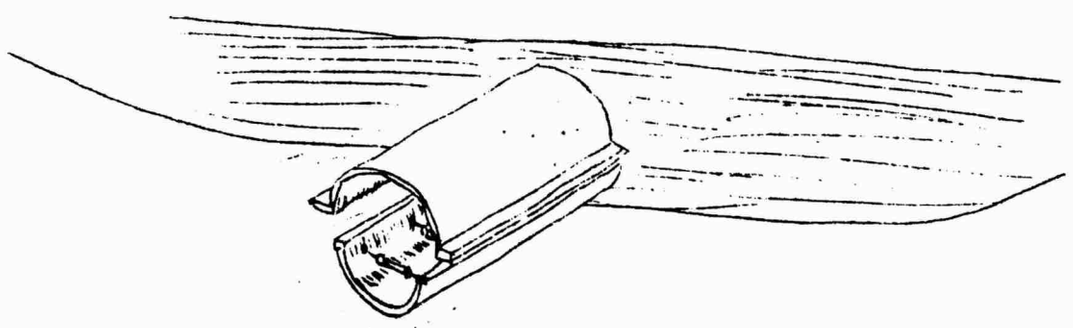
(3) Recommendation: That steel pickets be used to brace deadmen which cannot be obtained in the proper lengths needed.

(d) Repair of Crushed Culvert.

(1) Observation: Instead of discarding a damaged culvert, the section which is irreparable can be replaced.

(2) Evaluation: If the top section of a culvert is crushed, the following procedure can be used to repair it. A hole is drilled in either side of the lower portion of a section of a culvert and a cable is run through each hole and a turnbuckle attached. The sides of the lower portion of the section are then drawn together and held in place while the upper section is placed and bolted down. The turnbuckle is then removed and placed on the next section. The procedure eliminates time lost due to extraction and repair of an entire culvert, plus saves a considerable amount of material.

(3) Recommendation: That the method described above be used when repairing crushed culverts.



H. McK. ROPER, JR.
LTC, CE
Commanding

AGE-CO (7 Nov 69) 1st Ind
SUBJECT: Operational Report of 168th Engineer Battalion (CMB) (Army) for Period Ending 31 October 1969

DA, HEADQUARTERS, 79TH ENGINEER GROUP, APO 96491 20 November 1969

TO: Commanding Officer, 20th Engineer Brigade, ATTN: AVBI-OS, APO 96491

1. The Operational Report of the 168th Engineer Battalion has been reviewed. The basic ORLL of the 168th Engineer Battalion (Combat) (Army) is forwarded.

2. This report is considered to be an adequate summary of the battalion's operational experience during the report period.

A. L. WRIGHT
COL, CE
Commanding

CF:
CO, 168th Engr Bn

AVBI-OS (7 Nov 69) 2nd Ind
SUBJECT: Operational Report of 168th Engineer Battalion (CBT) for Period Ending 31 October 1969

DA, HEADQUARTERS, 20TH ENGINEER BRIGADE, APO 96491 5 DEC 1969

TO: Commanding General, United States Army Vietnam, ATTN: AVHGC-DST, APO 96375

1. Submitted in accordance with USARV Regulation 525-15, dated 13 April 1968.

2. This headquarters concurs with the submitted report with the following comment:

Section II, paragraph 2(b), page 13: Guidance published by this headquarters is that voids in concrete blocks will be filled with mortar or grout.

FOR THE COMMANDER:

S. B. KENNEDY
LTC, AGC
Adjutant

CF:
CO, 79th Engr Gp
CO, 168th Engr Bn

AVHGC-DST (7 Nov 69) 3d Ind
SUBJECT: Operational Report-Lessons Learned of the 168th Engineer Battalion (Combat)(Army) for the Period Ending 31 October 1969, RCS CSFOR-65 (R2)

HEADQUARTERS, UNITED STATES ARMY, VIETNAM APO San Francisco 96375 25 DEC 1969

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-DT, APO 96558

1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 October 1969 from Headquarters, 168th Engineer Battalion (Combat)(Army).

2. Comments follow:

a. Reference item concerning "Installation of Deadmen", section 2, page 13, paragraph 2c; concur. An analysis of revised construction should be made to insure that adequate rigidity and bearing area are provided in order for the deadman to sustain design loading.

b. Reference item concerning "Repair of Crushed Culvert", section 2, page 14, paragraph 2d; concur. However, the culvert must be of sufficient size to allow access to remove turnbuckle assembly. If the assembly is allowed to remain in the culvert after repairs are completed, it will trap debris and eventually block the culvert.

FOR THE COMMANDER:

B. A. GOODWIN
MAJ AGC
Assistant Adjutant General

Cy furn:
168th Engr Bn
20th Engr Bde

GPOP-DT (7 Nov 69) 4th Ind
SUBJECT: Operational Report of HQ, 168th Engineer Battalion (C) (A) for Period Ending 31 October 1969, RCS CSFOR-65 (R2)

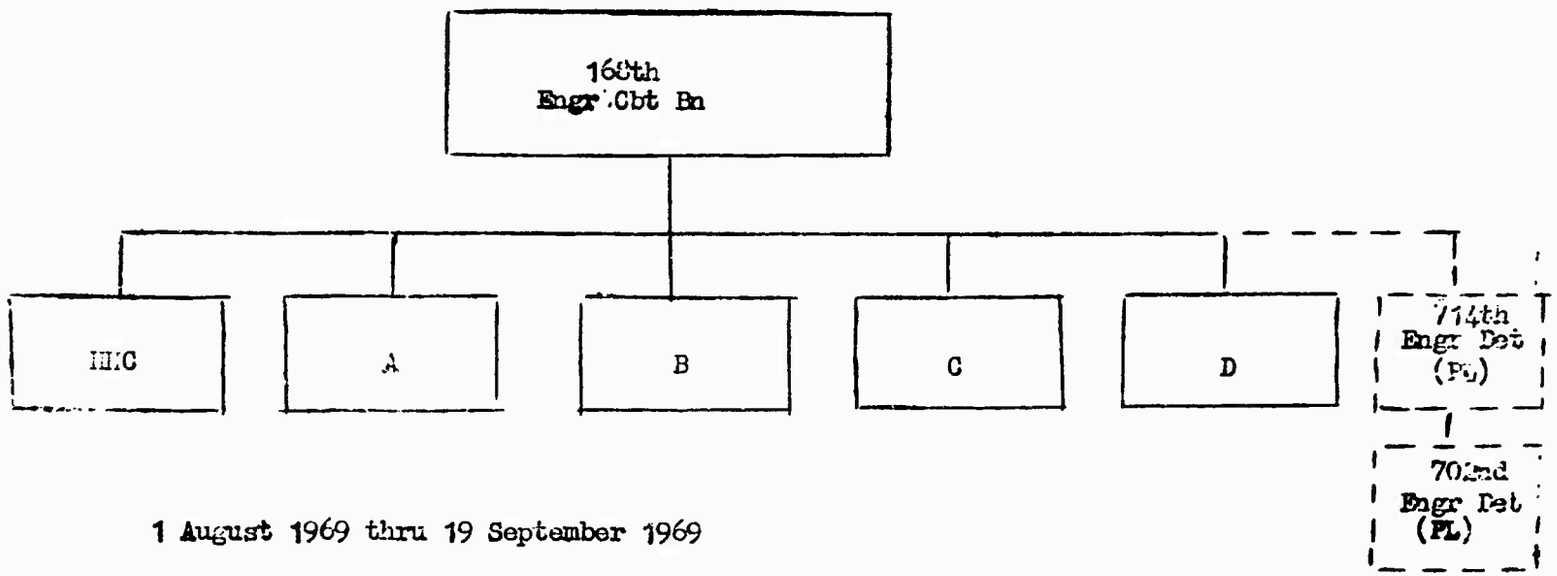
HQ, US Army, Pacific, APO San Francisco 96558 2 JAN

TO: Assistant Chief of Staff for Force Development, Department of the Army, Washington, D. C. 20310

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:

D. A. TUCKER
CPT. AGC
ASST AG

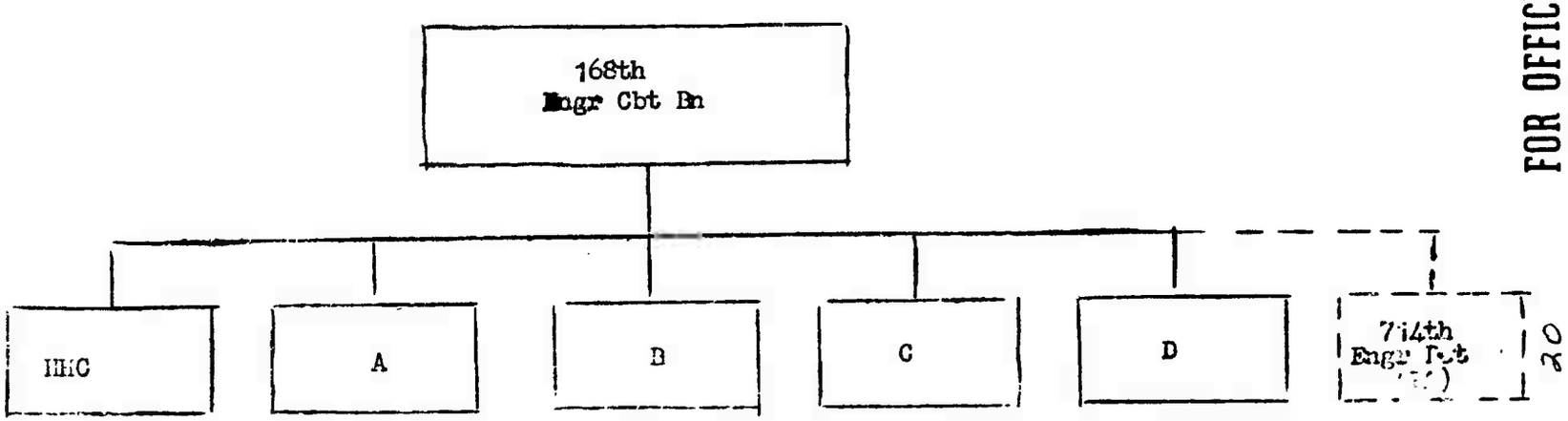


1 August 1969 thru 19 September 1969

19

FOR OFFICIAL USE ONLY

Incl 1



20 September 1969 thru 31 October 1969

Incl 2

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) HQ, OACSFOR, DA, Washington, D.C. 20310	2a. REPORT SECURITY CLASSIFICATION FOR OFFICIAL USE ONLY 2b. GROUP

3. REPORT TITLE

Operational Report - Lessons Learned, HQ, 168th Engineer Battalion

4. DESCRIPTIVE NOTES (Type of report and inclusive dates)

Experiences of unit engaged in counterinsurgency operations, 1 Aug 69 to 31 Oct 69.

5. AUTHOR(S) (First name, middle initial, last name)

CO, 168th Engineer Battalion

6. REPORT DATE 7 November 1969	7a. TOTAL NO. OF PAGES 23	7b. NO. OF REFS
8a. CONTRACT OR GRANT NO. b. PROJECT NO. N/A c. d	9a. ORIGINATOR'S REPORT NUMBER(S) 694275 9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	

10. DISTRIBUTION STATEMENT

11. SUPPLEMENTARY NOTES N/A	12. SPONSORING MILITARY ACTIVITY OACSFOR, DA, Washington, D.C. 20310

13. ABSTRACT

DD FORM 1 NOV 68 1473

UNCLASSIFIED

Security Classification